

**TDMS No.** 99027 - 03

**Test Type:** CHRONIC

**Route:** DOSED FEED

**Species/Strain:** RATS/F 344

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a)**  
**WITH AVERAGE SEVERITY GRADES[b]**  
CHROMIUM PICOLINATE MONOHYDRATE

**CAS Number:** 27882-76-4

**Date Report Reqsted:** 03/16/2007

**Time Report Reqsted:** 08:39:18

**First Dose M/F:** 08/12/02 / 08/12/02

**Lab:** SRI

F1\_R2

**C Number:** C99027

**Lock Date:** 05/03/2005

**Cage Range:** ALL

**Date Range:** ALL

**Reasons For Removal:** ALL

**Removal Date Range:** ALL

**Treatment Groups:** Include ALL

**TDMSE Version:** 1.7.0

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Species/Strain: RATS/F 344

Lab: SRI

FISCHER 344 RATS MALE	0 PPM	2000 PPM	10000 PPM	50000 PPM
<b>Disposition Summary</b>				
Animals Initially in Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	11	9	12	19
Natural Death	2	5	3	3
Survivors				
Natural Death			2	
Terminal Sacrifice	37	36	33	28
Animals Examined Microscopically	50	50	50	50
<b>ALIMENTARY SYSTEM</b>				
Intestine Large, Cecum	(48)	(48)	(48)	(50)
Intestine Large, Colon	(48)	(46)	(46)	(48)
Ulcer				1 [3.0]
Intestine Large, Rectum	(48)	(48)	(48)	(50)
Hemorrhage		1 [2.0]		
Intestine Small, Duodenum	(49)	(48)	(48)	(50)
Intestine Small, Ileum	(49)	(45)	(47)	(45)
Liver	(50)	(50)	(50)	(50)
Angiectasis			2 [2.5]	
Basophilic Focus	27	32	29	27
Clear Cell Focus	32	32	27	26 [1.0]
Degeneration, Cystic	1 [2.0]	1 [1.0]		1 [1.0]
Eosinophilic Focus	1	3	5	1
Eosinophilic Focus, Multiple				1
Hemorrhage	2 [2.0]	3 [1.7]	3 [2.0]	1 [2.0]
Hepatodiaphragmatic Nodule	7 [2.0]	8 [2.0]	6 [2.0]	3 [2.0]
Inflammation, Chronic	1 [2.0]			1 [2.0]
Mixed Cell Focus	4			3
Necrosis, Focal	5 [1.2]	1 [2.0]	4 [1.8]	1 [1.0]
Vacuolization Cytoplasmic		1 [2.0]		
Bile Duct, Hyperplasia	23 [2.2]	11 [2.5]	14 [2.5]	9 [2.6]
Centrilobular, Bile Stasis				1 [2.0]
Centrilobular, Necrosis	4 [2.0]	3 [2.0]	2 [2.5]	3 [1.7]
Centrilobular, Hepatocyte, Atrophy				1 [2.0]
Hepatocyte, Vacuolization Cytoplasmic	8 [2.6]	4 [2.8]	9 [3.0]	6 [2.8]

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FISCHER 344 RATS MALE	0 PPM	2000 PPM	10000 PPM	50000 PPM
Portal Vein, Thrombosis, Focal		1 [3.0]		
Serosa, Fibrosis	1 [3.0]			
Serosa, Pigmentation	1 [3.0]			
Mesentery	(15)	(10)	(8)	(9)
Accessory Spleen	3 [2.0]		1 [2.0]	
Hemorrhage	1 [3.0]			
Fat, Necrosis	10 [2.5]	7 [2.6]	5 [2.4]	6 [2.5]
Oral Mucosa	(1)	(0)	(1)	(0)
Hyperplasia	1 [3.0]			
Pancreas	(49)	(50)	(50)	(50)
Atrophy	37 [1.7]	40 [2.0]	35 [1.6]	27 [1.9]
Acinus, Hyperplasia, Focal	6 [2.5]		2 [2.5]	2 [3.0]
Salivary Glands	(50)	(50)	(50)	(50)
Atrophy	5 [1.6]	6 [1.0]	7 [1.3]	5 [1.4]
Necrosis		1 [2.0]		
Stomach, Forestomach	(49)	(49)	(50)	(50)
Edema	1 [3.0]	2 [2.5]	4 [2.8]	1 [4.0]
Erosion	1 [1.0]		1 [3.0]	1 [2.0]
Hemorrhage			1 [3.0]	
Hyperkeratosis	1 [2.0]			1 [2.0]
Inflammation, Acute		1 [2.0]		
Inflammation, Chronic Active		1 [1.0]		
Ulcer	2 [4.0]		1 [2.0]	
Vacuolization Cytoplasmic		1 [4.0]	3 [2.7]	3 [3.7]
Epithelium, Hyperplasia	3 [2.3]	5 [2.6]	4 [3.0]	3 [3.3]
Stomach, Glandular	(49)	(49)	(50)	(50)
Edema			1 [2.0]	
Erosion	1 [3.0]	1 [2.0]	1 [2.0]	3 [2.3]
Hyperplasia, Focal			2 [4.0]	
Ulcer	3 [1.0]	1 [2.0]	2 [3.0]	1 [4.0]
Tongue	(1)	(2)	(0)	(1)
Epithelium, Hyperplasia		2 [2.0]		1 [2.0]
CARDIOVASCULAR SYSTEM				
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	48 [1.9]	47 [1.7]	47 [1.5]	45 [1.7]
Fibrosis				1 [3.0]
Thrombosis	3 [1.7]	2 [2.0]	4 [2.3]	2 [2.5]
Artery, Mineralization		1 [3.0]		

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Species/Strain: RATS/F 344

Lab: SRI

FISCHER 344 RATS MALE	0 PPM	2000 PPM	10000 PPM	50000 PPM
ENDOCRINE SYSTEM				
Adrenal Cortex	(50)	(49)	(50)	(50)
Accessory Adrenal Cortical Nodule	5 [1.8]	22 [1.7]	23 [1.6]	15 [1.3]
Angiectasis	1 [2.0]			
Degeneration, Fatty	12 [2.3]	7 [1.9]	8 [2.0]	8 [2.3]
Hematopoietic Cell Proliferation				1 [1.0]
Hemorrhage	1 [3.0]	2 [1.5]		
Hyperplasia, Focal	18 [2.0]	22 [2.1]	19 [1.8]	21 [1.6]
Hypertrophy, Focal		1 [2.0]		
Necrosis	1 [3.0]			1 [2.0]
Capsule, Hyperplasia			1 [2.0]	
Adrenal Medulla	(50)	(49)	(50)	(50)
Angiectasis	1 [2.0]			
Hyperplasia	10 [2.0]	2 [2.0]	2 [1.5]	4 [2.3]
Islets, Pancreatic	(50)	(50)	(50)	(50)
Hyperplasia	6 [1.8]	4 [1.3]	3 [2.0]	2 [1.0]
Parathyroid Gland	(45)	(48)	(49)	(47)
Pituitary Gland	(50)	(49)	(50)	(50)
Cyst		1 [3.0]		
Pars Distalis, Angiectasis				1 [2.0]
Pars Distalis, Cyst	2 [3.0]	1 [3.0]	2 [3.0]	3 [3.0]
Pars Distalis, Hemorrhage				1 [2.0]
Pars Distalis, Hyperplasia, Focal	15 [2.2]	13 [2.5]	17 [2.2]	18 [2.4]
Pars Distalis, Necrosis				1 [2.0]
Pars Intermedia, Cyst				1 [3.0]
Rathke's Cleft, Hemorrhage		1 [2.0]		
Thyroid Gland	(50)	(50)	(50)	(50)
Ultimobranchial Cyst	1 [1.0]			
C-cell, Hyperplasia	10 [1.3]	5 [1.4]	13 [2.2]	6 [1.2]
Follicular Cell, Hyperplasia		1 [3.0]		
GENERAL BODY SYSTEM				
Tissue NOS	(2)	(1)	(2)	(1)
Hemorrhage	1 [2.0]			
Necrosis, Focal			1 [3.0]	

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GENITAL SYSTEM				
Epididymis	(49)	(50)	(50)	(50)
Granuloma Sperm	1 [2.0]		1 [2.0]	
Preputial Gland	(50)	(50)	(50)	(50)
Atrophy				1 [4.0]
Cyst	4 [3.0]	3 [3.0]	3 [3.0]	2 [3.0]
Hyperplasia	3 [2.7]	1 [4.0]		2 [2.5]
Inflammation, Chronic	26 [2.3]	35 [2.1]	30 [2.0]	25 [2.0]
Prostate	(50)	(50)	(50)	(50)
Cyst		1 [2.0]	1 [3.0]	1 [3.0]
Inflammation, Chronic	8 [2.5]	12 [2.4]	10 [2.3]	11 [2.3]
Epithelium, Hyperplasia	4 [1.8]	9 [1.2]	11 [1.4]	4 [1.5]
Seminal Vesicle	(50)	(50)	(50)	(50)
Inflammation, Chronic	1 [2.0]			
Bilateral, Cyst			1 [4.0]	
Epithelium, Hyperplasia			1 [1.0]	
Testes	(50)	(50)	(50)	(50)
Mineralization	1 [4.0]			
Thrombosis, Focal	1 [3.0]			
Germinal Epithelium, Atrophy	11 [3.5]	9 [3.1]	12 [3.1]	11 [3.3]
Interstitial Cell, Hyperplasia		3 [1.7]	4 [2.3]	5 [1.2]
HEMATOPOIETIC SYSTEM				
Bone Marrow	(50)	(50)	(50)	(50)
Depletion Cellular		1 [2.0]		
Myelofibrosis	3 [1.7]	1 [3.0]		3 [2.7]
Lymph Node	(15)	(15)	(13)	(17)
Hyperplasia, Lymphoid		1 [2.0]		
Mediastinal, Ectasia		2 [2.0]	1 [3.0]	1 [2.0]
Mediastinal, Hemorrhage	2 [2.5]	2 [2.5]	1 [3.0]	1 [2.0]
Mediastinal, Hyperplasia, Lymphoid	1 [2.0]		1 [4.0]	1 [2.0]
Mediastinal, Pigmentation	1 [3.0]			
Pancreatic, Ectasia	1 [2.0]	1 [3.0]	2 [3.0]	4 [2.0]
Pancreatic, Hemorrhage	2 [2.5]		1 [2.0]	1 [3.0]
Pancreatic, Hyperplasia, Lymphoid	1 [2.0]			1 [2.0]
Pancreatic, Infiltration Cellular, Histiocyte				1 [2.0]
Renal, Ectasia		1 [3.0]		
Renal, Hyperplasia, Lymphoid		1 [3.0]		

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Lymph Node, Mandibular	(2)	(0)	(1)	(2)
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Atrophy	1 [3.0]			
Ectasia	2 [3.5]		2 [3.0]	5 [3.0]
Hemorrhage	1 [2.0]	1 [2.0]		
Hyperplasia, Reticulum Cell	1 [4.0]		1 [2.0]	1 [4.0]
Spleen	(50)	(50)	(50)	(50)
Fibrosis			1 [4.0]	1 [3.0]
Hematopoietic Cell Proliferation	3 [2.3]	1 [2.0]	2 [3.5]	4 [2.8]
Hemorrhage	1 [3.0]			
Metaplasia, Osseous			1 [1.0]	
Necrosis	2 [3.0]			
Pigmentation	26 [2.2]	29 [2.3]	28 [2.4]	33 [2.2]
Thrombosis				1 [1.0]
Lymphoid Follicle, Hyperplasia	20 [1.9]	9 [1.9]	8 [2.3]	14 [1.6]
Thymus	(48)	(45)	(48)	(48)
Atrophy	37 [3.0]	40 [3.1]	36 [3.2]	35 [3.3]
Hemorrhage		1 [2.0]		
INTEGUMENTARY SYSTEM				
Mammary Gland	(49)	(50)	(50)	(49)
Cyst	3 [3.0]	1 [3.0]	3 [3.0]	6 [3.0]
Hyperplasia	8 [1.6]	13 [1.4]	20 [1.9]	9 [1.6]
Skin	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion			1	4
Hyperkeratosis	2 [1.5]	3 [4.0]	3 [4.0]	1 [4.0]
Inflammation, Chronic			1 [2.0]	
Ulcer			1 [4.0]	
Epidermis, Hyperplasia		3 [3.3]	3 [3.3]	1 [3.0]
Pinna, Ulcer				1 [4.0]
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Osteopetrosis	2 [2.5]		1 [2.0]	
Skeletal Muscle	(2)	(1)	(0)	(3)
Hemorrhage	1 [4.0]			
Necrosis	1 [3.0]			

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NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Compression	5 [2.4]	4 [2.5]	4 [3.0]	5 [3.0]
Edema, Focal				1 [1.0]
Hemorrhage	6 [1.2]	8 [1.4]	5 [1.2]	1 [1.0]
Metaplasia, Lipocyte, Focal				1 [2.0]
Necrosis	1 [2.0]	2 [3.0]	2 [3.0]	
Thrombosis		1 [2.0]		1 [1.0]
RESPIRATORY SYSTEM				
Lung	(50)	(50)	(50)	(50)
Fibrosis				1 [2.0]
Hemorrhage	2 [1.5]	3 [2.3]	3 [2.3]	
Infiltration Cellular, Eosinophil		1 [2.0]		
Infiltration Cellular, Histiocyte	43 [1.0]	47 [1.0]	41 [1.0]	43 [1.1]
Inflammation, Chronic		1 [2.0]	3 [1.7]	2 [1.0]
Metaplasia, Osseous	5 [1.2]	4 [1.0]	3 [1.0]	2 [2.0]
Metaplasia, Squamous, Focal		1 [2.0]		
Alveolar Epithelium, Hyperplasia	13 [1.5]	11 [1.6]	15 [1.7]	19 [1.6]
Alveolar Epithelium, Metaplasia, Squamous				1 [4.0]
Nose	(50)	(50)	(50)	(50)
Foreign Body	12 [1.3]	9 [1.6]	6 [1.3]	3 [2.0]
Inflammation, Chronic	11 [1.3]	16 [1.9]	11 [1.4]	7 [1.9]
Thrombosis			1 [3.0]	
Goblet Cell, Hyperplasia	1 [1.0]	1 [3.0]		
Respiratory Epithelium, Hyperplasia			1 [2.0]	
Respiratory Epithelium, Metaplasia, Squamous		2 [2.5]		
Trachea	(50)	(50)	(50)	(50)
SPECIAL SENSES SYSTEM				
Ear	(1)	(0)	(0)	(0)
Hemorrhage	1 [2.0]			
External Ear, Inflammation, Acute	1 [2.0]			
Eye	(50)	(50)	(50)	(50)

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FISCHER 344 RATS MALE	0 PPM	2000 PPM	10000 PPM	50000 PPM
Cataract	1 [2.0]	3 [2.7]	3 [2.3]	2 [1.0]
Degeneration			1 [3.0]	
Pigmentation, Hemosiderin, Focal				1 [2.0]
Retinal Detachment, Focal				1 [2.0]
Retina, Degeneration	1 [1.0]	1 [4.0]		
Retina, Necrosis, Focal				1 [3.0]
Harderian Gland	(50)	(50)	(50)	(50)
Hyperplasia, Focal		1 [1.0]		
Zymbal's Gland	(0)	(1)	(0)	(0)
URINARY SYSTEM				
Kidney	(50)	(49)	(50)	(50)
Cyst	1 [3.0]			1 [3.0]
Infarct			2 [2.0]	1 [2.0]
Inflammation, Suppurative	1 [1.0]			
Nephropathy	50 [1.8]	47 [1.7]	47 [1.6]	48 [1.5]
Thrombosis			1 [1.0]	
Pelvis, Dilatation		2 [1.5]		
Renal Tubule, Hyperplasia	3 [1.0]		5 [1.0]	3 [1.0]
Renal Tubule, Necrosis		1 [1.0]		
Transitional Epithelium, Hyperplasia	1 [1.0]	3 [1.7]	1 [2.0]	1 [1.0]
Urethra	(0)	(1)	(1)	(0)
Angiectasis		1 [3.0]		
Bulbourethral Gland, Cyst			1 [3.0]	
Urinary Bladder	(50)	(50)	(50)	(50)
Edema	1 [2.0]			
Hemorrhage	1 [2.0]	1 [3.0]		
Inflammation, Chronic	1 [2.0]		1 [1.0]	1 [2.0]

\*\*\* END OF MALE \*\*\*

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FISCHER 344 RATS FEMALE	0 PPM	2000 PPM	10000 PPM	50000 PPM
<b>Disposition Summary</b>				
Animals Initially in Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	11	13	11	8
Natural Death	3	2	3	2
Survivors				
Natural Death	1			1
Terminal Sacrifice	35	35	36	39
Animals Examined Microscopically	50	50	50	50
<b>ALIMENTARY SYSTEM</b>				
Esophagus	(50)	(50)	(50)	(50)
Infiltration Cellular, Lymphocyte				1 [3.0]
Intestine Large, Colon	(47)	(48)	(50)	(48)
Intestine Small, Ileum	(46)	(49)	(50)	(47)
Necrosis, Lymphoid			1 [1.0]	
Liver	(50)	(50)	(50)	(50)
Angiectasis				1 [1.0]
Basophilic Focus	41 [4.0]	44	46 [1.0]	44
Clear Cell Focus	27	23	22	21
Degeneration, Cystic		1 [1.0]		
Eosinophilic Focus		1		1
Eosinophilic Focus, Multiple			1	
Hemorrhage	1 [1.0]	1 [1.0]	1 [1.0]	
Hepatodiaphragmatic Nodule	8 [2.0]	8 [2.0]	8 [2.0]	8 [2.0]
Hypertrophy, Focal	1 [2.0]			
Infiltration Cellular, Lymphocyte				1 [2.0]
Inflammation, Chronic	3 [2.0]	1 [2.0]	4 [2.5]	2 [1.5]
Mixed Cell Focus		1	4	3
Necrosis, Focal	2 [1.5]		2 [1.5]	3 [1.3]
Thrombosis	2 [3.0]	1 [4.0]		1 [1.0]
Bile Duct, Hyperplasia	3 [2.3]	6 [2.3]	5 [2.0]	2 [3.0]
Centrilobular, Necrosis	4 [2.8]	1 [2.0]	1 [2.0]	1 [2.0]
Hepatocyte, Vacuolization Cytoplasmic	6 [3.3]	3 [3.3]	6 [2.3]	5 [2.6]
Mesentery	(11)	(6)	(7)	(13)
Accessory Spleen			1	2

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Fibrosis			1 [2.0]	
Fat, Necrosis	11 [3.0]	6 [2.0]	5 [2.8]	12 [2.3]
Oral Mucosa	(0)	(0)	(1)	(0)
Pancreas	(49)	(50)	(50)	(50)
Atrophy	21 [1.5]	27 [1.3]	27 [1.6]	26 [1.3]
Metaplasia, Hepatocyte		1 [2.0]		
Necrosis				1 [3.0]
Acinus, Hyperplasia, Focal	1 [2.0]		1 [2.0]	1 [2.0]
Salivary Glands	(50)	(50)	(50)	(50)
Atrophy	11 [1.2]	19 [1.1]	19 [1.1]	16 [1.1]
Cyst		1 [3.0]		
Vacuolization Cytoplasmic			1 [3.0]	
Stomach, Forestomach	(49)	(50)	(50)	(50)
Edema	1 [2.0]	1 [4.0]		1 [2.0]
Erosion				1 [2.0]
Inflammation, Acute	1 [1.0]			
Inflammation, Chronic Active	1 [2.0]			
Ulcer	1 [2.0]	2 [3.0]	1 [4.0]	2 [3.5]
Epithelium, Hyperplasia	2 [3.5]	1 [2.0]	1 [4.0]	1 [2.0]
Stomach, Glandular	(49)	(50)	(50)	(50)
Edema		3 [2.3]		
Erosion	2 [2.5]	3 [1.3]	1 [1.0]	2 [1.0]
Inflammation, Acute		1 [2.0]		
Ulcer	1 [4.0]	1 [3.0]		
Tongue	(1)	(0)	(3)	(2)
Hyperkeratosis			1 [4.0]	
Epithelium, Hyperplasia	1 [2.0]		2 [3.0]	2 [2.0]
CARDIOVASCULAR SYSTEM				
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	44 [1.3]	44 [1.2]	47 [1.2]	46 [1.2]
Inflammation, Chronic			1 [1.0]	
Thrombosis	3 [2.3]			
ENDOCRINE SYSTEM				
Adrenal Cortex	(50)	(50)	(50)	(50)
Accessory Adrenal Cortical Nodule	4 [1.3]	10 [1.8]	9 [1.8]	9 [1.4]

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Test Type: CHRONIC

Time Report Requested: 08:39:18

Route: DOSED FEED

First Dose M/F: 08/12/02 / 08/12/02

Species/Strain: RATS/F 344

Lab: SRI

FISCHER 344 RATS FEMALE	0 PPM	2000 PPM	10000 PPM	50000 PPM
Angiectasis	1 [2.0]	1 [3.0]	2 [2.0]	
Degeneration, Cystic		3 [2.3]		
Degeneration, Fatty	6 [1.7]	5 [2.2]	2 [3.0]	3 [2.0]
Hematopoietic Cell Proliferation			1 [1.0]	
Hemorrhage	1 [2.0]	3 [1.7]	1 [2.0]	
Hyperplasia, Focal	12 [2.0]	20 [1.7]	26 [1.8]	24 [1.8]
Hypertrophy	2 [3.5]	5 [1.8]	3 [2.3]	7 [2.0]
Hypertrophy, Focal			1 [1.0]	
Necrosis	2 [2.0]		1 [1.0]	1 [1.0]
Vacuolization Cytoplasmic	1 [4.0]	2 [3.0]		1 [2.0]
Adrenal Medulla	(50)	(49)	(50)	(50)
Hyperplasia		4 [1.5]		1 [2.0]
Islets, Pancreatic	(49)	(50)	(50)	(50)
Angiectasis, Focal		1 [1.0]		
Hyperplasia	1 [1.0]	2 [2.0]	3 [3.0]	1 [2.0]
Parathyroid Gland	(48)	(49)	(48)	(43)
Pituitary Gland	(49)	(50)	(50)	(50)
Hemorrhage			1 [1.0]	1 [3.0]
Pars Distalis, Angiectasis	1 [3.0]	1 [2.0]	3 [3.0]	1 [3.0]
Pars Distalis, Cyst	11 [3.0]	8 [3.0]	9 [3.0]	11 [3.0]
Pars Distalis, Hyperplasia, Focal	15 [2.2]	7 [2.7]	9 [2.9]	12 [2.6]
Pars Distalis, Infiltration Cellular, Mononuclear Cell		1 [2.0]		
Pars Distalis, Pigmentation		1 [1.0]		
Pars Intermedia, Angiectasis	1 [2.0]		1 [2.0]	
Pars Intermedia, Cyst	1 [3.0]		2 [3.0]	1 [3.0]
Rathke's Cleft, Hemorrhage	1 [2.0]		1 [3.0]	
Thyroid Gland	(49)	(50)	(50)	(50)
Ultimobranchial Cyst	1 [2.0]	5 [3.0]		
C-cell, Hyperplasia	25 [1.7]	29 [1.5]	24 [1.3]	21 [1.1]

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

Clitoral Gland	(50)	(50)	(50)	(50)
Cyst	2 [3.0]	5 [3.0]	2 [3.0]	5 [3.0]

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Lab: SRI

FISCHER 344 RATS FEMALE	0 PPM	2000 PPM	10000 PPM	50000 PPM
Hyperplasia	8 [2.4]	10 [2.6]	11 [2.6]	4 [2.3]
Inflammation, Chronic	4 [2.3]	5 [2.0]	3 [2.7]	3 [1.7]
Ovary	(50)	(50)	(50)	(50)
Cyst	8 [3.0]	5 [3.0]	6 [3.0]	7 [3.0]
Uterus	(50)	(50)	(50)	(50)
Angiectasis				1 [3.0]
Hemorrhage	1 [4.0]			
Hyperplasia, Cystic	17 [2.1]	30 [1.7]	24 [1.6]	19 [1.9]
Inflammation, Suppurative	1 [2.0]	1 [3.0]		1 [3.0]
Inflammation, Chronic		1 [1.0]	1 [2.0]	
Cervix, Hemorrhage	1 [2.0]			
Vagina	(5)	(6)	(1)	(3)
Inflammation				1 [2.0]
HEMATOPOIETIC SYSTEM				
Bone Marrow	(50)	(50)	(50)	(50)
Infiltration Cellular, Histiocyte		1 [4.0]		
Myelofibrosis	2 [3.5]	3 [1.3]	1 [1.0]	
Lymph Node	(9)	(10)	(11)	(7)
Deep Cervical, Ectasia	1 [2.0]			
Deep Cervical, Hemorrhage	1 [2.0]			
Deep Cervical, Hyperplasia, Lymphoid	1 [2.0]			
Mediastinal, Ectasia	3 [2.0]	2 [2.5]	1 [4.0]	1 [2.0]
Mediastinal, Hemorrhage	2 [2.0]	2 [3.0]	3 [2.0]	
Mediastinal, Hyperplasia				1 [2.0]
Mediastinal, Hyperplasia, Lymphoid	1 [2.0]		2 [2.5]	1 [2.0]
Mediastinal, Pigmentation	2 [2.0]			
Mediastinal, Pigmentation, Hemosiderin		2 [2.0]		
Pancreatic, Ectasia			1 [3.0]	
Pancreatic, Hemorrhage		1 [1.0]	1 [2.0]	1 [2.0]
Pancreatic, Hyperplasia, Lymphoid			1 [2.0]	1 [4.0]
Pancreatic, Pigmentation				1 [2.0]
Lymph Node, Mandibular	(1)	(3)	(1)	(0)
Ectasia	1 [1.0]	1 [2.0]	1 [2.0]	
Hyperplasia, Lymphoid	1 [2.0]			
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Ectasia			1 [3.0]	
Hemorrhage	1 [1.0]			
Hyperplasia, Reticulum Cell			1 [2.0]	

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FISCHER 344 RATS FEMALE	0 PPM	2000 PPM	10000 PPM	50000 PPM
Pigmentation, Hemosiderin	1 [2.0]	1 [2.0]		
Spleen	(50)	(50)	(50)	(49)
Fibrosis		2 [3.0]	1 [1.0]	
Hematopoietic Cell Proliferation	4 [2.5]	5 [1.8]	1 [1.0]	2 [3.5]
Hemorrhage			1 [3.0]	
Hyperplasia, Lymphoid, Focal			1 [4.0]	1 [3.0]
Infarct				1 [4.0]
Pigmentation	40 [2.8]	43 [2.8]	44 [2.9]	44 [3.1]
Thrombosis				1 [2.0]
Lymphoid Follicle, Hyperplasia	7 [1.7]	5 [1.8]	7 [1.7]	6 [2.0]
Thymus	(46)	(48)	(49)	(48)
Atrophy	37 [3.1]	37 [3.2]	45 [3.2]	45 [3.2]
Cyst			1 [3.0]	
INTEGUMENTARY SYSTEM				
Mammary Gland	(50)	(49)	(50)	(50)
Cyst	8 [3.0]	2 [3.0]		1 [3.0]
Hyperplasia	37 [3.0]	38 [2.8]	33 [2.6]	42 [2.7]
Skin	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion		1	3	
Fibrosis			1 [4.0]	
Hyperkeratosis		2 [3.0]		2 [3.5]
Inflammation, Chronic			2 [1.5]	2 [1.0]
Ulcer			1 [3.0]	1 [3.0]
Epidermis, Hyperplasia				1 [2.0]
Sebaceous Gland, Hyperplasia				1 [2.0]
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Osteopetrosis		1 [1.0]		
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Compression	9 [3.6]	10 [3.4]	11 [3.1]	13 [3.5]
Gliosis	1 [2.0]			
Hemorrhage	2 [1.0]	1 [1.0]	2 [1.5]	3 [1.3]

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Lab: SRI

FISCHER 344 RATS FEMALE	0 PPM	2000 PPM	10000 PPM	50000 PPM
Spinal Cord	(2)	(4)	(3)	(1)
RESPIRATORY SYSTEM				
Lung	(50)	(50)	(50)	(50)
Congestion				1 [2.0]
Foreign Body				2 [2.0]
Hemorrhage	3 [2.0]	1 [2.0]	1 [2.0]	4 [1.8]
Hyperplasia, Lymphoid				1 [2.0]
Infiltration Cellular, Histiocyte	49 [1.1]	47 [1.1]	47 [1.1]	46 [1.0]
Inflammation, Chronic	2 [1.5]	4 [1.3]	3 [1.3]	8 [1.4]
Metaplasia, Osseous	2 [1.0]	2 [1.0]	1 [2.0]	
Metaplasia, Squamous		1 [2.0]		
Necrosis	1 [3.0]			
Thrombosis	1 [3.0]			1 [1.0]
Alveolar Epithelium, Hyperplasia	6 [1.3]	5 [1.2]	6 [1.3]	4 [2.0]
Alveolar Epithelium, Metaplasia, Squamous		1 [2.0]		
Serosa, Hyperplasia	1 [2.0]			
Nose	(50)	(50)	(50)	(50)
Foreign Body		1 [1.0]		1 [2.0]
Inflammation, Chronic	5 [1.6]	4 [1.5]	3 [1.7]	3 [2.3]
Nasolacrimal Duct, Cyst				1 [3.0]
Turbinates, Dysplasia			1 [4.0]	
SPECIAL SENSES SYSTEM				
Eye	(47)	(49)	(50)	(50)
Cataract	2 [2.5]	2 [3.0]	1 [4.0]	2 [3.0]
Edema	1 [2.0]			
Hemorrhage		1 [2.0]		
Inflammation, Chronic				1 [2.0]
Retinal Detachment	1 [2.0]			
Bilateral, Retinal Detachment		1 [2.0]		
Cornea, Hyperplasia				1 [1.0]
Retina, Degeneration	1 [4.0]	2 [3.0]	1 [4.0]	1 [4.0]
Harderian Gland	(50)	(50)	(50)	(50)
Hyperplasia, Focal			1 [1.0]	
Zymbal's Gland	(1)	(0)	(0)	(0)

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URINARY SYSTEM				
Kidney	(47)	(50)	(50)	(50)
Cyst		1 [3.0]		
Infarct, Chronic			1 [2.0]	
Infiltration Cellular, Lymphocyte				1 [2.0]
Nephropathy	46 [1.3]	47 [1.3]	48 [1.2]	50 [1.2]
Thrombosis	1 [2.0]	1 [1.0]		
Papilla, Inflammation, Suppurative			1 [2.0]	
Renal Tubule, Hyperplasia	1 [1.0]		1 [2.0]	2 [1.0]
Transitional Epithelium, Hyperplasia			1 [1.0]	
Transitional Epithelium, Mineralization, Focal		1 [2.0]		
Urinary Bladder	(50)	(50)	(49)	(50)
Edema			1 [3.0]	1 [3.0]
Hyperplasia, Lymphoid		1 [1.0]		

\*\*\* END OF REPORT \*\*\*